

FORECASTING GRAIN BY TIME CYCLES

**by W. D. Gann
(1946 course)**

This E-Book is not to be sold.

It is a free educational service
in the public interest
published by

[Gann Study Group](#)

FORECASTING GRAIN
BY TIME CYCLES

BY W.D. GANN

4.

AUTHOR OF
TRUTH OF THE STOCK TRADE
WALL STREET STOCK SELECTOR
NEW STOCK TREND DETECTOR
HOW TO MAKE PROFITS IN COMMODITIES

MEMBER
AMERICAN ECONOMIC ASSN.
ROYAL ECONOMIC SOCIETY

W. D. GANN

82 WALL STREET

NEW YORK 5, N. Y.

FORECASTING GRAINS BY TIME CYCLES

TIME RULES

TIME is the most important factor in forecasting market movements. While SPACE and VOLUME are important and momentum is also a factor to be considered, TIME will overbalance both SPACE and VOLUME and arrest momentum.

DAILY TIME RULE

A minor change occurs every 7, 10, 14, 20 and 21, 28 and 30 days. This time period is only a proportion of the major cycles.

MONTHLY TIME RULE

Changes in trend occur every 30, 60, 90, 120, 135, 180, 225, 270, 300, 315 and 360 days. The third and fourth months are the first of importance for a change in trend; the sixth next; then the ninth; and eleventh to twelfth most important.

The life of an option in Wheat or Corn can never be more than 12 months, therefore the important changes in trend occur in the 3rd, 6th, and 9th months, especially the 6th and 9th because they are one-half and three-fourths of the life of the Option. The 4th or last quarter, or three months, nearly always marks a reversal in trend and a rapid move one way or the other.

RULES FOR FAST MOVES UP OR DOWN

The big market moves, like volcanic eruptions, are over very quickly because they are the result of weeks, months, or years of accumulation or distribution. When once angles or resistance are overcome and the accumulated forces are let loose, they move very rapidly until the energy is exhausted and the time is up. Check Wheat campaigns of 1917, 1924-25, 1933, 1945-46.

Seven weeks or 49 days usually marks the culmination of a rapid move up or down, especially if a major cycle is running out. Sometimes the top or bottom will be reached on the 52nd day, but the change can start anytime between the 42nd and the 49th day, therefore begin to watch for tops or bottoms in the sixth week of a rapid move up or down. This change in trend may be only a minor one. 52 days is one-seventh of a year, which is a very important period. It is also one-seventh of 360° or $51\frac{3}{8}^{\circ}$. The "seventh" period from the beginning of anything is the most fatal and often marks a rapid change in trend one way or the other.

TIME AND SPACE

SPACE movements are important, but can never overcome TIME. However, they are important to watch as they often give the first cue for a change in trend and the TIME change is shown later. For example:

If Wheat has been advancing for a long time and reactions of 5 to 7 cents have occurred several times; then a reverse move of 10 to 12 cents or more occurs, this is a sign that the opposing forces are starting to cause a change in trend and you should take warning.

If a market has been advancing for several months and has been reacting 3 weeks to one month according to our *Time Rule*, then a decline runs 5 weeks or into the second month, which exceeds the time of all previous reactions, it will mark the first important change in trend according to *TIME*. This rule can be applied to the minor daily moves as well as to the major yearly moves.

WHY BOTTOMS AND TOPS CHANGE

Bottoms and tops change over a period of years not only because Supply and Demand change, but because the forces or cause of price change and on account of longitude and latitude. The cycle that it is working in either forms squares or triangles which lowers or raises prices according to the forces which produce the energy that causes the moves.

WHY PRICES MOVE FASTER AT HIGH LEVELS THAN AT LOW LEVELS

The higher prices go the faster they move; the lower they go the slower they move and the smaller the fluctuations. Note the angles on the "Circle Chart" and "May Wheat Permanent Chart", which show that this is caused by the distance from the main center.

The big money is made in active markets when prices are at high levels and it is made in a short time. You can make plenty of money staying out of the market most of the time and waiting for these big moves.

HOW TO DETERMINE CHANGE IN TREND

- 1 - Change is indicated by position of the Daily Chart and by angles being broken or tops or bottoms being raised or lowered. Remember, a daily indication may only mean a move of 7 to 10 days.
- 2 - The Weekly Chart shows a more important change in trend, but judge according to the position on angles and whether the time cycle is running out or not. The Weekly Chart can reverse and only run down 3 to 4 weeks and sometimes only 2 weeks and a change occur in the 3rd week, then the trend continue up or down, as the case may be, but if it runs into the 5th week, expect the move to continue in that direction.

Don't forget the Rule of Three. Remember that everything moves in threes. Watch the third day, week, and month. Christ rose on the 3rd day; Daniel was 3 days in the lion's den; Jonah three days in the whale's belly. The 5th day was the Day of Ascension. Watch the 5th week, 5th month or 5th year in a market for a strong move up or down.

- 3 - The monthly change in trend is shown by broken angles, broken bottoms, etc. After a monthly change occurs, it may run 3 to 4 months and then reverse the trend, or may run 6 months to the next important time change, all depending upon the cycle it is in and how many months it has moved up or down from the base.

- 4 - Yearly changes are denoted by the cycles and by broken tops or bottoms of each Option. When the bottoms are broken or the tops are crossed after a long period, it means a big change, especially if a cycle has run out.

LOST MOTION IN SPACE

It is a well known fact in mechanics that it is impossible to make any kind of a machine that will run without lost motion. Markets have a period of lost motion which amounts to between $\cdot 2$ and $\cdot 2\frac{1}{2}$ cents, which is taking up the slack. In other words, they will exceed the angle or the main center at extreme points by 2 to $2\frac{1}{2}$ cents; if they make 3 cents beyond the angle they will go higher or lower.

When markets become extremely dull at low levels thru lack of buying power, which is the same as lack of energy, they may fail to reach extreme points indicated, which would be an indication of strength. The same would apply if they failed to reach main centers, showing weakness.

LOST MOTION IN TIME

There is no such thing as slow motion in time, but there is a transition period which amounts to the same thing as lost motion in space movements. This varies according to the major and minor cycles from 1 to 3 cents above tops or bottoms, Geometrical angles or price resistance levels.

WHEN THE MARKET IS WEAKEST OR STRONGEST

The market reaches its strongest or weakest point when the square of SPACE equals the square of TIME. In other words, when it is up or down 30 cents in 30 days, it will stand at the square of the base, and when it overcomes the square from the base at high or low levels, you can expect a big reverse move.

When a market hesitates at top or bottom and gets narrow and dull, watch the third to fourth day for a change in trend; next watch the 7th day; then 10, 14, 20, and 28 days.

When a market is advancing and the trend is up on the monthly, weekly and daily charts, it is in strong position as long as it stays above the angle of $78\frac{1}{2}^\circ$ or 4×1 to the left of the 45° angle and should never be sold short in this position either on a weekly, monthly or daily chart.

It is still in a strong position when it is above the angle of $67\frac{1}{2}^\circ$ or 2×1 to the left of the 45° angle, but breaking this angle a long distance from the base will indicate a decline to the angle of 45° . As I have said before, the angle of 45° is the "death" angle and when it is broken one way or the other, a big reverse move takes place.

When the angle of $22\frac{1}{2}^\circ$ or 2×1 to the right of 45° is broken, it means complete destruction and return to the base or bottom.

But do not overlook the fact that lost positions can be regained on the daily, weekly, or monthly charts provided the main time cycle has not run out.

Note the position between bottom and top and whether it is above or below the main center or half-way point. One of the first indications of a reversal in trend will be the breaking of the 45° angle or the breaking of the half-way point in the last minor move.

DURATION OF MOVES

All market movements obey the law of "12" and its multiples. See "Permanent Master Twelve Chart."

Major changes occur in the 11th to 12th, 18th, 22nd to 24th, 34th to 36th, 42nd, 48th to 49th, 54th, 60th, 66th, 72nd, 78th, 84th, 90th, 96th, 102nd, 108th, 114th, 120th, 126th, 132nd, and 144th months.

Wheat seldom moves more than 18 months in one direction without a big major reversal. The next important point for a top or bottom is the 28th to 30th month. It often culminates in the 27th or 28th month as there is a strong mathematical reason for this. Corn also follows this rule.

Remember, these numbers apply to weeks and days as well.

HOW TO DETERMINE DURATION OF MARKET MOVES

Besides the position of the cycle it is in and the position on angles, the height is determined by the width of the base. Reverse rule for bear market. If several weeks or months are taken up for distribution or accumulation, the greater the extent of the move up or down. The longer a market remains in a narrow range, the greater the move and the longer the duration when it starts.

The fastest moves occur in the 3rd or last stage of a cycle. Note end of 10, 20, 30, and 50-year Cycles on Wheat Chart. It is important to go over each 10-year Cycle and get the duration in Time of major moves and also the number of cents moved up or down.

SEASONAL TREND

The seasonal trend, or Nature's natural curve of Wheat, runs down from August to December or January, and runs up from February to June. Of course this varies according to crop conditions, Supply and Demand, and the cycle it is in. But if the curve of Supply and Demand remains smooth, Wheat would follow this natural trend.

TIME CYCLES

TIME is the most important factor in determining market movements because the future is a repetition of the past and each market movement is working out TIME in relation to some previous Time Cycle. A study of the various Time Periods and Cycles will convince you how the Grain Market repeats the same price levels under the same Time Periods of some previous cycle.

The Great Time Cycles are most important because they record the periods of extreme high or low prices. These cycles are: 90 years, 82 to 84 years, 60 years, 45 years, 30 years, and 20 years.

The Minor Time Cycles are: 13 years, 10 years, 7 years, 5 years, 3 years, 2 years and one year.

GREAT TIME CYCLES

90-YEAR CYCLE

When we start from Sunrise or the Horizon and measure to Noon, we get an arc of 90 degrees, which is straight up and down starting from the bottom. 90 months or 90 years is a very important time period. The 90-year Time Cycle is one of the very important ones because it is two times 45. This time period must always be watched at the end of long time periods. For example:

1932 was 90 years from 1842. Study the Wheat prices around this time. 1850 and 1851 -- add 90 years and when we get 1940-41 Note low prices of Wheat around that time.

1855, June, high for Wheat 170. 90 years from this period gives 1945. Wheat reached high in June, selling at 170, some options at 168 and 169.

1850-51, extreme lows for Wheat. Add 45 years and we get 1895, when extreme low was reached.

From 1895, we again add 45 years, and get 1940.

84-YEAR CYCLE

This repeated 84 years from 1845 to 1852 and brought low prices in 1929 to 1933.

60-YEAR CYCLE

Compare 60 years from major tops and bottoms and see how this cycle works out.

49-YEAR CYCLE

The 49th Year ends a major cycle for Wheat and extreme high or extreme low prices occur 49 to 50 years apart. Note low 1845 and 1846; then 50 years later extreme low again. Note high 1867; and 50 years later, 1917, highest prices for over 100 years. Note 1932 and 1933 extreme lows were 80 years from 1852 lows.

The 49-year Cycle is 225° to 240° in the second circle of 360° , the period of 49 years being 588 months. Note that 576 is the end of the 4th square of 12, which is the fatal square or death point, representing the grave, the winter season, the end of life or anything, and the beginning over again.

45-YEAR CYCLE

The digits 1 to 9 when added up total 45. 45 is the most important

angle. Therefore 45 years in time is a very important cycle. One-half of 45 is 22½ years or 270 months. One-fourth of 45 is 11¼ years or 135 months, which is three times 45. You will note how important these points are on the 360° Circle Chart.

One-eighth of 45 is 5-5/8 years or 67½ months. One-sixteenth of 45 is 33½ months.

30-YEAR CYCLE

Compare 1845-1867 with 1895-1897 and 1925-1927.

Compare 1914-1920 with 1944-1950.

20-YEAR CYCLE

This is a very important cycle because it is one-third of the 60-year Cycle. 20 years equals 240 months which is two-thirds of the Circle of 360°.

MINOR TIME CYCLES

13-YEAR CYCLE

In making up an Annual Forecast on Wheat, you consider the 49-year Cycle, the 30-year Cycle, the 20-year Cycle, the 10-year Cycle, and the 7-year Cycle, and in addition you must consider the 13-year Cycle because Wheat often works out this cycle from extreme high to extreme low and from extreme low to extreme high and then back to extreme low. Extremely large crops or extremely small or short crops often recur 13 years apart or 156 months apart.

Go over the Wheat chart from 1841 to date. Compare 1841 with 1854 or 13 years apart. Also note the 1842 low and 1852 high or 10 years apart. Then note 1855, or 13 years from 1842. Note extreme low in 1844 and extreme high in 1857; then 1854 to 1867; 1864 to 1877; 1867 to 1881; 1881 to 1894. Note extreme low was reached in 1894 in December and in January, 1895. 1888 to 1901; 1898, extreme high, to 1911; 1895, January, extreme low, to 1908 top, and higher prices in 1909. 1894 low to 1907 low, 13 years apart. 1904 low to 1917 high; 1907 to 1920; 1909 to 1922; 1914 to 1927; 1920 to 1933; 1921 to 1934; 1923, low in July, and 1936, low in June.

Note last low in 1924 in March; then 1937 was 13 years from 1924 and 20 years from 1917, and 30 years from 1907. Note lows were reached in March, 1907.

December, 1919: Wheat reached extreme high. 156 months later, in December, 1934, extreme low for May Wheat. Note the last extreme low before the lows of 1914, there were triple bottoms. In September and December, 1906 and a third bottom around the same level in March, 1907. 13 years later, in December, 1919, extreme high, and in May, 1920, last high. 13 years from these starting points. Then, as noted above, 13 years from the extreme high in 1919 and 1920, the extreme lows were reached in 1932 and 1933.

It is important to note 13 years, 26 years, 39 years, and then 49 to 52 years from any extreme high or low point.

10-YEAR CYCLE

Wheat varies slightly at times from the 10-year Cycle, and tops come out between 10 years and six months and 11 years. This is due to the position of some previous tops or bottoms as Time and angles will show. But the main cause is that there are two crops of Wheat produced each year in this country and if the crop is extremely good or bad, high or low prices run over into the 11th year at extremes. Another thing is that there is a Wheat crop harvested almost every month in the year in some country.

Note top on Wheat in May, 1877. According to the 10-year Cycle there should be a top in May, 1887. The high of that year was reached in the month of May and a decline followed, but the extreme high prices for several years occurred in September, 1888, bringing the top out from 1877 in the 11th year.

The next top and extreme high prices would be due in 1898. The Leiter corner occurred in May, 1898, and the May Option sold at \$1.85. According to the 10-year Cycle another top should come out in May, 1908. The high of the year 1908 was reached in May, but in the following May, 1909, extreme high prices were reached, coming out on the 11-year Cycle, which is due to 135 months or 11 1/4 years being 3/8 of 360°.

The next high point according to the 10-year Cycle would be due in 1918 or 1919. But note that the last extreme high for over 50 years occurred in 1867. Therefore extreme high prices on the 50-year Cycle would be due in 1917. May Wheat advanced to \$3.25 in May, 1917, and the Government stopped trading in it, fixing the price at \$2.50 per bushel and high prices prevailed until 1920.

For 1947, compare prices for 1847, 1907, 1917, 1927 and 1937.

7-YEAR CYCLE

This is a very important Cycle. You should check 7 years from any important top or bottom. Also watch 14 years, 21 years, 28 years, and multiples of 7. Tops and bottoms often come out 7 1/2 years apart or on the 90th month. It is very important to watch 90 months for minor as well as major top or bottom.

7-YEAR CYCLE

This period of 60 months is important because it is 1/4 of the 20-year Cycle and 1/2 of the 10-year Cycle, and 1/6 of the Circle of 360° or the 30-year Time Period.

3-YEAR CYCLE

Culminations of major and minor moves often occur in the 34th to 36th month from major and minor tops and bottoms. Always watch 3 years from any important top or bottom as a change in trend is likely to occur.

1-YEAR CYCLE

This is the smallest cycle but in view of the fact that there is a grain crop harvested in the United States every year and in fact a Spring and Winter crop of Wheat, important changes in trend often occur one year from previous tops and bottoms. This may not be a change in the main trend but a reaction can run one to three months at the end of a one-year period.

Whenever you start to make up a forecast one year or more in advance, always check back and see if the market is running out a major cycle or a minor cycle, especially when the market is nearing extreme high prices or extreme low prices. Study war periods and war cycles against war periods; normal cycles against normal time periods.

A careful review of all the major and minor cycles, when used in connection with the Geometrical Angles, will help you to determine which cycle is repeating the closest. By keeping up the months when extreme highs or lows in previous cycles were reached, you can rate the months when the market is making extreme lows or highs in the current cycle, which will give you a double check on your forecast.

December 4, 1946.